Shark Attack

Kit contains:

- 1 foam circle
- 1 foam rectangle
- 1 robo-shark picture
- 2 googly eyes
- 1 Q-tip

You will need: scissors, glue, dish soap, a container of water, and a permanent marker (optional).

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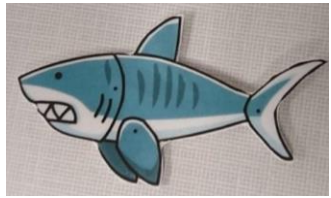
INSTRUCTIONS

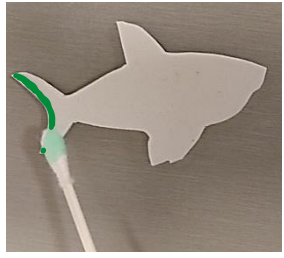
Step 1. Make the shark. Glue the shark picture to the foam rectangle. Then cut out both layers.



Step 2. Make the shark snack. Stick the googly eyes on the foam circle. Draw a frowny mouth if desired.

Step 3. Fill a large container with a couple inches of water. Float the shark snack in the water. Note that he isn't going anywhere.

Step 4. Put a little bit of liquid dish soap on the Q-tip. Apply it to the V-shape of the shark's fin, both on the edge and on the back.



Step 5. Attack! Put your shark in the water and watch it swim.

Did your shark get its snack? If not, you might want to try again. This requires a reset. Dump out and refill the container with fresh water. Then re-apply the dish soap to the shark. Adjust your aim and let the shark go!

SURFACE TENSION

I suspect you're wondering why your shark swims and your shark snack does not. This has to do with the **surface tension** of the water. Water molecules are naturally attracted to each other, more so than the air above them. This creates a "skin" of sorts on top of the water. You might have seen a bug walking on water — this is possible because of the high surface tension.

The surface tension of the water pulls on the snack from all sides. However, the dish soap on the shark reduces the water's surface tension. The water molecules are no longer pulling on the V-shaped fin, so the shark swims in the other direction.

Source: https://www.scientificamerican.com/article/make-a-paper-fish-swim-with-surface-tension/